

08CS5682-1

**RECEIVED  
CENTRAL FAX CENTER  
OCT 16 2006****REMARKS**

Claims 1-20 were pending in the present Application. Claim 19 has been amended and Claims 4, 6, 14, and 15 have been withdrawn, leaving Claims 1-3, 5, 7-13, and 16-20 for consideration upon entry of the present Amendment. No new matter has been introduced by way of amendment. For example, support for the amendment to Claim 19 can be found at least in paragraph [0030] of the Specification as originally filed.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendment and the following remarks.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1-3, 5, 7-13, and 16-20 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent No. 4,289,685 to Druschke *et al.* (hereinafter "Druschke"), U.S. Patent No. 4,113,695 to Mark (hereinafter "Mark"), and U.S. Patent No. 4,600,742 to Higgins (hereinafter "Higgins"). Applicants respectfully traverse each rejection.

Independent Claim 1 is directed to a process for producing a fire resistant polycarbonate sheet, comprising compounding an aqueous solution of a flame retardant salt with a polycarbonate composition to form a fire resistant polycarbonate composition, wherein shear is applied during the compounding; and extruding the fire resistant polycarbonate composition into the fire resistant polycarbonate sheet, wherein a number of surface inclusions in the extruded fire resistant polycarbonate sheet is reduced about 100 percent compared to compounding the flame retardant salt in solid form with the polycarbonate composition.

Independent Claim 16 is directed to a process for reducing haze in a fire resistant polycarbonate sheet, comprising compounding an aqueous solution of a flame retardant salt with a polycarbonate composition to form a fire resistant polycarbonate composition, wherein shear is applied during the compounding; and extruding the fire resistant polycarbonate composition into the fire resistant polycarbonate sheet, wherein a number of surface inclusions in the extruded fire resistant polycarbonate sheet is reduced about 100 percent compared to compounding the flame

08CS5682-1

retardant salt in solid form with the polycarbonate composition, and wherein the haze is reduced compared to compounding the flame retardant salt in solid form with the polycarbonate composition.

Currently amended independent Claim 19 is directed to a process for reducing color in a fire resistant polycarbonate sheet, comprising: compounding an aqueous solution of a flame retardant salt with a polycarbonate composition to form a fire resistant polycarbonate composition, wherein shear is applied during the compounding; applying a vacuum to at least one extruder vent port during the compounding; and extruding the fire resistant polycarbonate composition into the fire resistant polycarbonate sheet, wherein a number of surface inclusions in the extruded fire resistant polycarbonate sheet is reduced about 100 percent compared to compounding the flame retardant salt in solid form with the polycarbonate composition, and wherein a yellowness index is reduced compared to compounding the flame retardant salt in solid form with the polycarbonate composition.

On pages 3, 4, and 5 of the present Office Action, Examiner has stated, “[g]iven that the use of extruders apply shear to applicants’ components during compounding . . . , it would be expected that the use of the same or similar devices would primarily provide shear during the compounding step in the reference.” In relying upon the theory of inherency, Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pt. App. & Inter. 1990) (emphasis in original) (Applicant’s invention was directed to a biaxially oriented, flexible dilation catheter balloon (a tube which expands upon inflation) used, for example, in clearing the blood vessels of heart patients). The examiner applied a U.S. patent to Schjeldahl which disclosed injection molding a tubular preform and then injecting air into the preform to expand it against a mold (blow molding). The reference did not directly state that the end product balloon was biaxially oriented. It did disclose that the balloon was “formed from a thin flexible inelastic, high tensile strength, biaxially oriented synthetic plastic material.” *Id.* at 1462 (emphasis in original). The examiner argued that Schjeldahl’s balloon was inherently biaxially oriented. The Board reversed on the basis that the examiner did not provide objective evidence or cogent technical reasoning to

08CS5682-1

support the conclusion of inherency.).

Druschke, Mark, and Higgins independently fail to explicitly or inherently disclose compounding with an extruder to create a shear effective to produce about a 100 percent reduction in the number of surface inclusions in Applicants' extruded fire resistant polycarbonate sheet. As such, the Office Action fails to provide a basis in fact and/or technical reasoning to reasonably support the determination that such shear is an inherent characteristic of extrusion, which necessarily flows from the respective teachings. Like the case of *Ex parte Levy*, where the reference applied by the examiner did not directly state that the end product balloon was biaxially oriented, Druschke, Mark, and Higgins do not state using extrusion to prepare the claimed aqueous compositions would create a shear effective to produce a fire resistant polycarbonate having about 100 percent reduced surface inclusions over compounding fire resistant salt in solid form. Thus, because Druschke, Mark, and Higgins neither explicitly nor inherently disclose this characteristic, Applicants assert that a *prima facie* case of obviousness has not been established against Claims 1-3, 5, 7-13, and 16-20.

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of the rejection to Claims 1-3, 5, 7-13, and 16-20. Applicants further traverse the remaining assertions set forth in the office action, including the teachings of the various references. Since these references fail to render the claims obvious for at least the reasons set forth above, these assertions are moot and are therefore not specifically addressed in detail. Applicants, therefore, further request reconsideration and withdrawal of the rejection of Claims 3, 5, 7, 11, 13, and 18 as being unpatentable over Druschke in combination with Mark, and the rejection of Claims 11, 13, and 18 as being unpatentable over Higgins in combination with Mark.

With respect to currently amended Claim 19, Applicants assert that a *prima facie* case of obviousness has also not been established because the feature "applying a vacuum to at least one extruder vent port during compounding," has not been disclosed or suggested by the cited art. Given that none of Druschke, Mark or Higgins discloses or suggests this feature, any combination of these references would also fail to disclose or suggest this feature.

08CS5682-1

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection as applied to Claim 19, as well as to Claim 20, which depends from, and ultimately includes all the features of Claim 19.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

08CS5682-1

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

A handwritten signature in black ink, appearing to read 'Dean Y. Shahriari', is written over a horizontal line.

Dean Y. Shahriari  
Registration No. 56,783

Date: October 16, 2006  
Customer No. 23413  
Telephone (404) 607-9991  
Facsimile (404) 607-9981